APPENDIX II

Total number of pages = 40

Protocol

PROTOCOL FOR
EFFICACY EVALUATION OF
HEALTH CARE PERSONNEL HANDWASH PRODUCTS

FOR: Bayer Chemicals Corporation

HTR STUDY NO.: 03-122085-106

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1.0 INTRODUCTION

The FDA issued a tentative final monograph (Federal Register, Vol. 59, pp. 31402 to 31452, June 17, 1994) prescribing the use of a health care personnel handwash method to demonstrate the antimicrobial efficacy of cleansing products containing antimicrobial ingredients for frequent use. The method presented in the Monograph is based on an American Society for Testing Materials Standard Method for Evaluation of Health Care Personnel Handwash Formulation E1174-87 published in 1987. A revision of the ASTM Method was published in 2000 entitled Standard Test Method for Evaluation of the Effectiveness of Health Care Personnel or Consumer Handwash Formulations, E1174-00. This protocol is aligned with a revised version of the ASTM Method.

The procedure is designed to simulate routine hand washing conducted for the purpose of reducing the level of hand contamination of health care personnel under conditions of frequent use. For this procedure a broth culture of a bacterium which can be differentiated from the normal skin microflora is used to contaminate the hands of human subjects. Activity is measured by comparing the number of marker bacteria removed from artificially contaminated hands after a single use of the hand washing formulation to the baseline number, the number recovered from contaminated unwashed hands. A similar comparison is made following the 11th wash of a multiple (11) wash procedure. Prior to each of the washes, the hands are contaminated with the selected maker organism.

2.0 OBJECTIVE

The purpose of this study is to determine the ability of the test antimicrobial formulation to give reduction of transient microbial flora, *Staphylococcus aureus* ATCC 6538, when used in a hand washing procedure after a single treatment and after eleven treatments. *S. aureus* is not specified in the FDA Monograph as a test organism. Therefore, to properly control the study, a FDA approved positive control formulation, Hibiclens®, will be tested against a Monograph prescribed standard test organism, *Serratia marcescens* ATCC 14756, as well as the *S. aureus* strain.

3.0 STUDY SPONSOR AND MONITOR

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Study Representative: Kevin Ike Ajoku

4.0 INVESTIGATIVE ORGANIZATION AND PERSONNEL

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Sub-Investigator: Gayle K. Mulberry, M.S
Sub-Investigator: Ann R. Brady, B.A.G.S.

5.0 CLINICAL RESEARCH STANDARDS

The clinical investigation, including the informed consent, will be reviewed by an Institutional Review Board in accordance with Title 21 of the Code of Federal Regulations, Parts 50 and 56. Written approval by the Board must be obtained prior to the initiation of the study.

The study will be conducted in accordance with the Good Clinical Practice Regulations, the Standard Operating Procedures of Hill Top Research, Inc., and protocol amendment(s).

6.0 EXPERIMENTAL DESIGN

The antimicrobial activity of three test articles, the investigative antimicrobial formulation, a placebo for this formulation and a positive control formulation will be evaluated utilizing a direct paired comparison test design of baseline bacterial populations *vs.* post treatment bacterial populations. Activity of the three test articles will be evaluated against the marker organism S. *aureus* ATCC 6538. A total of 75 subjects will be tested using *S. aureus*, 30 will be assigned the test formulation (Test Article HTR Code A), 30 will be assigned the placebo formulation (Test Article HTR Code B), and 15 will be assigned the positive control, Hibiclens® (Test Article HTR Code C). In addition to these 75 subjects, 15 additional subjects will be evaluated in a control group using *S. marcescens* ATCC 14756 and Hibiclens® (Test Article HTR Code C). The study will consist of a one-week pretest conditioning period and one day of treatment.

7.0 STUDY MATERIAL

7.1 Test Article

HTR Code	Code and Description
A	Test Formulation: 3554-194 Description: clear to slightly cloudy liquid
B	Test Formulation: 3554-196 Description: clear to slightly cloudy liquid
C	Control Formulation: Hibiclens® Description: clear red liquid

7.2 Equipment

7.2.1 Colony Counter - Quebec colony counter.

7.2.2 Incubator - Any incubator capable of maintaining a temperature of 35 ± 2°C or 25 ± 2°C may be used (depending on the test organism).

7.2.3 Sterilizer - Any suitable steam sterilizer capable of producing the conditions of sterilization.

7.2.4 Timer (stop-clock) - One that can be read for hours, minutes and seconds.

7.2.5 Plastic Bags to Sample Hands - Low bioburden – such as Glad Food Storage Bags or equivalent, 29.2 cm x 31.8 cm. (Note: Bioburden is determined according to Hill Top Microbiology Department SOP No. 11-TOPC-20-0016.)

7.2.6 Bacteriological Pipettes, Sterile - 10.0 mL, 5.0 mL, 2.0 mL and 1.0 mL capacity.

7.2.7 Water Dilution Bottles - Any container that can be sterilized, having a 150 to 200 mL capacity and a tight closure may be used.

7.2.8 Test Tubes and Closures - Any of suitable size.

7.0 STUDY MATERIAL (CONT.)

7.2.9 Handwashing Sink - A sink of sufficient size to permit subjects to wash without touching hands to sink surface or other subjects.
7.2.10 Water faucets - located above the sink at a height, which permits the hands to be held higher than the elbow during the washing procedure.
7.2.11 Tap Water Temperature Regulator and Temperature Monitor - To monitor and regulate water temperature of 40 ± 2°C.
7.2.12 Erlenmeyer Flask - 2 L capacity for culturing test organism.

7.3 Reagents and Materials
7.3.1 Kit Products for Washout Period: non-antimicrobial bar soap and shampoo, antiperspirant/deodorant, rubber gloves, and disposable poly gloves.
7.3.2 Non-antimicrobial bland soap, Johnson's baby wash *head-to-toe*, Johnson & Johnson. Inc.
7.3.3 Stripping Fluid with Neutralizer - 0.075M phosphate buffer with 0.1% Triton X-100 (dissolve 0.4 g KH_2PO_4, 10.1 g Na_2HPO_4 and 1.0 g Triton X-100 in 1-L purified water containing a neutralizer* which rapidly quenches the antimicrobial activity of the test article(s). Final pH 7.8 ± 0.1. Final volume 75 ± 1.0 mL).
7.3.4 Dilution Fluid - Butterfield's phosphate buffered water (or other suitable diluent) containing an antimicrobial inactivator specific for the test formulation.
7.3.5 Trypticase Soy Agar
7.3.6 Trypticase Soy Broth
7.3.7 70% Isopropyl alcohol
7.3.8 Hibiclens®
7.3.9 Polysporin®

7.4 Marker Organisms
S. aureus ATCC 6538
S. marcescens ATCC 14756

***Note:** Prior to initiation of this study, the adequacy of the antimicrobial product neutralizers will be confirmed in accordance with Standard Test Methods for Evaluation of Inactivators of Antimicrobial Agents (ASTM E 1054-02).

8.0 STUDY POPULATION

Approximately one hundred-fifty (150) potential subjects will be enrolled into the pre-test conditioning period in order to provide 90 subjects who fulfill the criteria described below and who complete the study. The subjects will be randomly assigned to four treatment groups. Three of the groups will be for each test articles versus *S. aureus* and a fourth group will consist of control product versus *S. marcescens*. Subject eligibility will be based upon information provided in the Demographics/Dermatological/ Medical History Form (DCF 1) and the

8.0 STUDY POPULATION (CONT.)

Inclusion/Exclusion Form (DCF 2); and completion of a written informed consent (Exhibit A).

8.1 Subject Inclusion Criteria
Subjects will be eligible for enrollment if they:

8.1.1 Are a male or female, 18 through 65 years old;
8.1.2 Have signed a written informed consent (Exhibit A);
8.1.3 Are in good health, as evidenced by response to the Demographics/Dermatological/ Medical History Form (DCF 1);
8.1.4 Have hands and wrists that are free of dermatoses, cuts, lesions, and other skin disorders;
8.1.5 Have fingernails that are clean and extend no longer than approximately one (1) mm past the nail bed;
8.1.6 Are willing to refrain from using antimicrobial soaps (liquids and/or bars) for bathing, showering, and hand washing during the entire study;
8.1.7 Are willing to refrain from using anti-dandruff shampoo during the entire study;
8.1.8 Are willing to refrain from using medicated/antibacterial lotions, creams, oils, dishwashing liquids, talcs and other deodorant/antiperspirant products during the entire study;
8.1.9 Are willing to refrain from using topical steroids during the entire study;
8.1.10 Are willing to refrain form using topical or systemic antibiotic medication during the entire study; and
8.1.11 Are willing to comply with all study protocol requirements.

8.2 Subject Exclusion Criteria
Subjects will not be enrolled in the study if they:

8.2.1 Are currently participating in another clinical study at this or any other facility;
8.2.2 Have participated in any type of arm or hand wash study within the past seven (7) days;
8.2.3 Have cuts, scratches, or other skin disorders on their hands or wrists;
8.2.4 Have soap, detergent, antibiotic, Polysporin® and/or perfume allergies;
8.2.5 Have eczema or psoriasis on their hands or wrists;
8.2.6 Are currently pregnant;
8.2.7 Are currently lactating;
8.2.8 Have been medically diagnosed as having a medical condition such as: diabetes, hepatitis, an organ transplant, an immunologic disorder such as or AIDS (or HIV positive), Lupus erythematosus, thyroiditis or rheumatoid arthritis, and/or
8.2.9 Have any other medical condition, which in the opinion of the Investigator(s) would preclude participation.
8.2.10 Have artificial nails or nail tips.

8.0 STUDY POPULATION (CONT.)

8.2.11 Have any responsibility for care of children under age 3, or anyone having responsibilities for diapering, care of wounds, intravenous management or other bed-ridden related care roles.

8.2.12 Are currently using (on the test day) or have used since the kit pick-up any topical or systemic antibiotics, topical steroids or medicated/antibacterial lotions, creams, oils, dishwashing liquids, antidandruff shampoos, medicated or deodorant soaps, talcs and other deodorant/antiperspirant products.

8.2.13 Subjects with known sensitivity to isopropyl alcohol, chlorhexidine gluconate or triclosan.

8.3 Other Study Restrictions

8.3.1 Subjects should not use any other personal cleansing products.

8.3.2 Subjects should avoid chemically treated pools and hot tubs.

8.3.3 Subjects should avoid exposing their hands to harsh cleaning products, chlorine, or solvents.

9.0 SUBJECT WITHDRAWAL

After admission to the study, the subject may withdraw at any time for any reason. If possible, the reason for withdrawal will be recorded.

10.0 PROCEDURE

The study will be divided into three phases; subject enrollment period, a pre-test washout (conditioning) period of at least one week duration, and a one day test period.

10.1 Subject Qualification and Enrollment

Prospective subjects will visit the test facility to be screened for their eligibility to participate in the study. At this visit the informed consent will be signed, the forearms and hands of the subjects will be screened for any conditions that would exclude the subject from the study, a blood draw will be done for a complete blood count (CBC) to check their white blood cell count (WBC). This is to screen out immuno-compromised subjects.

Eligibility will be based upon information provided in the Demographics/Dermatological/ Medical History Form (DCF 1) and the Inclusion/Exclusion Form (DCF 2); and completion of a written informed consent (Exhibit A). Subjects will be given non-antibacterial containing soap, shampoo,

10.0 PROCEDURE (CONT.)

antiperspirant/deodorant, several pairs of disposable poly gloves, a pair of rubber gloves, a copy of the Subject's Study Instructions (Exhibit B). They will be instructed to use the soap, shampoo, antiperspirant/deodorant, poly gloves and rubber gloves and to follow the written instructions for the entire study period.

10.2 Washout Period

This period will last at least seven (7) days. Subjects will continue to follow the special study restrictions, use the non-antibacterial soap, shampoo, and antiperspirant/deodorant, rubber gloves and poly gloves.

10.3 Test Day Schedule

On the day of the test period, subjects will return to the test facility. Their hands and wrists will be re-examined to ensure that they are still free of cuts, lesions, and other skin disorders. They will also be asked if they have had any illnesses or taken any new medications (proprietary or prescribed) ordered by a physician since the last visit (DCF 3). Blood test results will be reviewed prior to any procedures being completed. Any subjects with abnormal lab values (per the lab's normal ranges), specifically white blood cell count, which in the Investigator's opinion might be a safety risk, will be excluded from the study. Also a urine pregnancy test will be done to exclude pregnant women. Subjects who still meet the study criteria will be eligible to continue on the study. Subjects continuing on the study will be assigned a permanent subject number 1 through 90. Not all subjects will be tested on the same "Test Day", approximately 20 subjects will be tested on a given day.

The following outlines the schedule of procedures for the test day:

Subjects Nos. 1 through 75 will be assigned to the phase of study using *S. aureus* and subject Nos. 76 through 90 are assigned to the *S. marcecsens* challenge group.

a. Subjects 1 through 75 are assigned to treatments, HTR Code A, HTR Code B and HTR CODE C, according to the randomization in Exhibit C. Subjects 76 through 90 are assigned treatment (HTR Code C) and will all be evaluated on the same "Test Day".

b. Subjects will perform a conditioning wash with a mild soap for 30 seconds. (Section 10.3.1)

c. Subjects' hands will be contaminated and baseline sampling performed. (Section 10.3.2) Then hands will be washed with a non-antimicrobial hand soap.

d. Subjects' hands treated with the assigned test article, each treatment preceded by hand contamination. (Section 10.3.3)

10.0 PROCEDURE (CONT.)

Following treatments 1 and 11, subjects' hands are sampled for post-treatment count and the maker organisms in the sampling fluid are enumerated. (Sections 10.3.5 and 10.3.6).

e. Subjects' hands will be washed with a non-antimicrobial bland soap following the first treatment/collection with the assigned test article.

f. After the hand sampling following treatment 11, the Subjects' hands will be rinsed with water, washed with Hibiclens and treated with 70% Isopropyl Alcohol (Section 10.3.7) for at least 30 seconds and allowed to air dry. Subjects 1-75 will also be provided with some Polysporin® spread on their hands and wrists.

10.3.1 Conditioning Wash

All subjects, prior to the baseline sampling perform a 30-second wash using a non-antimicrobial bland soap, Johnson's baby wash *head–to-toe* (Section 7.3.2). This procedure, described below, removes oil and dirt and familiarizes the subjects with the treatment procedure.

10.3.1.1 Five mL of Johnson's baby wash *head–to-toe* is dispensed into cupped hands and distributed over all surfaces of the hands taking care not to lose the substance.

10.3.1.2 After the material is spread, a small amount of tap water 40 ± 2°C is added, and the hands and lower third of the forearms are completely lathered for 30 seconds in a vigorous manner.

10.3.1.3 The hands and forearms are then rinsed under running tap water 40 ± 2°C for 30 seconds.

10.3.1.4 The hands are lightly patted dry with a disposable paper towel.

10.3.2 Baseline Bacteria Count

After completing the conditioning wash, a total volume of 4.5 mL of the assigned marker organism suspension, *S. aureus* ATCC 6538 or *S. marcescens* ATCC 14756, (Section 10.4), (minimum of 10^8 organisms per mL) is added into the subjects' cupped hands in 1.5 mL increments. After each 1.5 mL aliquot is added, the suspension is rubbed thoroughly over the surface of both hands, not going above the wrist. Each application and spreading should last approximately twenty (20) seconds. Between each aliquot the hands will be held away from the body and allowed to air dry for approximately thirty (30) seconds. Following the third 1.5mL aliquot the hands are held motionless away from the body and allowed to air dry for 90 ± 5 seconds.

(**NOTE:** The hands may not be completely dry at this time.)

10.0 PROCEDURE (CONT.)

Plastic bags having documented low bioburden, (Section 7.2.5) are placed on the subject's right and left hands. A 75 mL aliquot of stripping solution (Section 7.3.3) is aseptically added into each bag and the bacterial sampling procedure is carried out as described under Section 10.3.5 (Bacterial Sampling Procedure). The hands and forearms are then washed thoroughly with a non-antimicrobial bland soap (Section 7.3.2) and dried.

10.3.3 Multiple Treatment Procedure

Prior to each treatment, the subject's hands will be contaminated with 4.5 mL of a suspension of the assigned maker organisms as described in Section 10.3.2

After completing the contamination step, the subjects perform a treatment with the assigned test article, under close supervision. The treatment procedure follows that described in the Section 10.3.4 (Method for Treating Hands). The lower third of the forearm is to be included in the wash procedure.

This procedure is repeated a total of 11 times with at least five minutes between each treatment. Immediately after completing the 1st and 11th treatments, the hands are sampled as described in Section 10.3.5 (Bacterial Sampling Procedure).

10.3.4 Method for Treating Hands

10.3.4.1 Test Articles HTR Code A and HTR Code B

Immediately prior to treating, the hands are to be wetted with a small amount of water by passing the hands rapidly under 40 ± 2 °C tap water. A technician then dispenses two (2) pumps (approximately **4.0 mL**) from the test article container into the cupped palm of one hand. Thereafter the subject distributes the material over all surfaces of both hands. The material is worked vigorously over all surfaces of the hands and lower third of the forearm for thirty (30) seconds.

(A small amount of water may be added to moisten the hands if necessary after approximately 15 seconds.) Particular attention is to be paid to the area between the fingers, beneath the nails and around the thumb. The hands are rinsed under 40 ± 2°C running tap water for 30 seconds.

10.3.4.2 Test Article HTR Code C

Immediately prior to treating the hands are to be wetted with small amount of water by passing hands rapidly under the tap. Dispense 5.0 ml from a syringe into cupped palm of one hand and distribute over all surfaces of both hands. The material is worked vigorously over all surfaces of the hands and lower third of the forearm for fifteen (15) seconds. Particular attention is to be paid to the area between the fingers, beneath the

10.0 PROCEDURE (CONT.)

nails and around the thumb. Rinse hands under running tap water for 30 seconds.

NOTE: After treatments that are not followed by a sample collection, the subjects will lightly pat dry their hands and forearms using a disposable paper towel.

10.3.5 Bacterial Sampling Procedure

Within five (5) minutes after the completion of wash one (1) and wash eleven (11) plastic bags having low bioburden (Section 7.2.5) will be placed on the subject's right and left hands. A 75 mL aliquot of stripping fluid (Section 7.3.3) is aseptically added into each bag. The bag on each hand is secured and massaged for one minute in a uniform manner by a lab technician. A 3-5 mL aliquot of the fluid is aseptically obtained directly from the bagged hands within one minute of completing the massaging and immediately placed into tubes containing sterile Dilution Fluid (Section 7.3.4).

Fluid samples for bacteria counts are to be labeled by an Investigator derived code so that the individuals who prepare the plates and count the colonies are unaware of the sources of the sampling solution.

After the first post-treatment sampling, the hands and forearms are washed thoroughly with non-antimicrobial bland soap (Section 7.3.2) and dried.

10.3.6 Bacterial Counts of Stripping Fluid

Aliquots of the stripping fluid or dilutions of the fluid collected from subjects' hands are spread plated on Trypticase Soy Agar plates (Section 7.3.5).

The dilutions of the baseline samples plated represent duplicate dilutions of 10^{-4} through 10^{-6} of milliliter aliquots of the stripping fluid. The aliquots or dilutions of the treatment sample fluid to be plated represent dilutions of 10^{-1} through 10^{-4} milliliter aliquots of the stripping fluid. One replicate of the 10^{-1} dilution will be plated by spreading 1 mL across three plates containing recovery agar. Dilutions representing 10^{-2}, 10^{-3}, and 10^{-4} will be spread in duplicate. All dilutions and plating should be completed within 30 minutes of sample collection.

Plates collected from subjects contaminated with *S. aureus* ATCC 6538 are incubated for 48 ± 4 hours at 35 ± 2°C after which the colony forming units (CFU) on the plates resembling *S. aureus* are enumerated using standard counting methods. The plates collected from subjects contaminated with *S. marcescens* ATCC 14756 are incubated for 48 ± 4 hours at 25 ± 2°C. After incubation CFU resembling S. *marcescens* are enumerated. The actual plate counts are recorded on the form entitled Healthcare Personnel Handwash Bacterial Counts (DCF 4).

10.0 PROCEDURE (CONT.)

10.3.7 Disinfection of Hands

After the final sampling is completed, subjects' hands and wrists will be rinsed with water, washed for at least sixty (60) seconds with 5mL of Hibiclens® then treated for at least thirty (30) seconds with 70% isopropyl alcohol and allowed to air dry. A small amount of Polysporin® antibiotic ointment will be applied to the hands and wrists of Subjects 1-75.

To ensure that any delayed adverse events, such as primary skin infections, are reported to the Study Investigator, all test subjects will be given a copy of Subjects' Instructions Following Study Completion (Exhibit D) before leaving the clinical site after they have completed the study. This sheet will instruct the subjects to examine their hands daily until the final scheduled visit for the presence of pimples, blisters, or raised, red itching bumps surrounded by erythema and/or edema that may be indicative of a skin infection. Subjects, who notice such lesions, will be instructed to call the clinical test site. The subjects will return to the clinical test site within four (4) to eight (8) days after the study procedures have been completed to have their hands examined by the Medical Consultant. The Medical Consultant will complete DCF 6 for each subject on their follow-up visit.

10.4 Marker Organism and Preparation

10.4.1 *S. aureus* ATCC 6538

A stock culture of *S. aureus* ATCC 6538 is prepared by aseptically transferring at least three isolated colonies from an agar plate to 10 mL of sterile Tryptic Soy Broth (TSB) (Section 7.3.6) which is then incubated at 35 ± 2°C for 24 ± 4 hours. A series of at least three but no more than ten 24 hour broth transfers are made in 10 mL of TSB from this broth culture. If testing occurs on multiple days, it is desired to use a test culture the same number of transfers from the source.

A 2-liter flask containing 1000 mL of TSB is inoculated with 1.0 mL of a 24-hour broth transfer. The flask is incubated for 24 ± 4 hours at 35 ± 2°C. Prior to any withdrawal of culture, whether for hand contamination or for numbers assay, the suspension is stirred or shaken. A suspension is not used for more than eight hours.

The suspension is assayed for the number of organisms at the beginning and end of the use period.

10.0 PROCEDURE (CONT.)

10.4.2 *S. marcescens* ATCC 14756

A stock culture of *S. marcescens,* ATCC 14756 is prepared by aseptically transferring at least three isolated colonies from an agar plate to 10 mL of sterile Tryptic Soy Broth (TSB) (Section 7.3.6) which is then incubated at 25 ± 2°C for 24 ± 4 hours. A series of at least three but no more than ten 24 hour broth transfers are made in 10 mL of TSB from this broth culture. If testing occurs on multiple days, it is desired to use a test culture the same number of transfers from the source.

A 2-liter flask containing 1000 mL of TSB is inoculated with 1.0 mL of a 24-hour broth transfer. The flask is incubated for 24 ± 4 hours at 25 ± 2°C. Prior to any withdrawal of culture, whether for hand contamination or for numbers assay, the suspension is stirred or shaken. A suspension is not used for more than eight hours.

The suspension is assayed for the number of organisms at the beginning and end of the use period.

11.0 DATA EVALUATION

The number of colony forming units (CFU) recovered per sample dilution will be tabulated. The total number of CFU per mL of sampling solution will be calculated as well as the number per hand.

The data will be evaluated using parametric statistical analyses as follows:

Bacterial counts recovered from the hands will be transformed into log counts. The log count of each subjects left and right hand will be averaged. The changes from baseline counts at each sampling interval will be obtained for each test article.

An analysis of variance will be performed on the data to:
Compare baseline counts of subjects assigned different test articles.
Evaluate the effectiveness of each treatment as a function of the number of treatments (within treatment analysis).

12.0 ADVERSE EXPERIENCES

12.1 Definitions

An **Adverse Event/Experience** is any unexpected or undesirable experience occurring to a subject during a study, which may or may not be related to the test article. All adverse event/experiences will be recorded (DCF 5) and reported according to the Standard Operating Procedures of Hill Top Research, Inc.

A **Serious Adverse Drug Event/Experience** is any adverse drug experience occurring at any dose that results in any of the following outcomes:

- death;
- a life-threatening adverse drug experience;
- inpatient hospitalization or prolongation of existing hospitalization;
- a persistent or significant disability/incapacity;
- a congenital anomaly/birth defect

Important medical event/experiences that may not result in death, be life-threatening, or require hospitalization may be considered a serious adverse drug experience when, based upon appropriate medical judgment, they may jeopardize the patient or subject and may require medical or surgical intervention to prevent one of the outcomes listed in this definition.

An **Unexpected Adverse Drug Event/Experience** is any adverse drug event/ experience not listed in the current labeling for the test article or the current investigator's brochure.

12.2 Follow-up

If an **Adverse Event/Experience** occurs, the subject under the direction of the Investigator (or designee), may be referred to Hill Top's consultant physician for treatment.

Serious or Unexpected Drug Event/Experience will be followed to resolution to the extent possible (e.g., medical attention by subject's primary care physician).

12.3 Notification

The sponsor will be notified of all adverse event/experiences. Any **Serious or Unexpected Adverse Drug Event/Experience** which occurs during the study must be reported promptly by the investigator to the sponsor and the reviewing IRB, where applicable, within 24-hours of the information being reported to Hill Top Research, Inc.

13.0 INTERCURRENT ILLNESS REPORTING

If a subject reports that he/she has had an intercurrent illness during the wash-out period or during the one (1) day test period, the illness and any new medication taken will be documented on DCF 3. The subject may be discontinued from the study at the discretion of the Investigator(s).

14.0 CONCOMITANT MEDICATION

If the subject has taken any medication (proprietary or prescribed) ordered by a physician, information pertaining to that medication intake will be recorded appropriately on either DCF 3 or DCF 5.

15.0 DEVIATIONS FROM PROTOCOL

Any minor deviations from the protocol, not previously agreed to by the Sponsor and Investigator(s), that occur during the conduct of the study will be documented.

16.0 REPORT

The final report will summarize the method, data and conclusions relative to the test articles and the subjects. Source data will be retained by the testing facility on microfilm. The original source data will be maintained according to the investigator's standard operating procedure. A copy of the source documents may be obtained upon request of the Study Sponsor. Copies of transcribed data will be incorporated in the report.

17.0 NOTICE

No amendments to the protocol will be permitted without approval from the Study Sponsor, Investigator and where applicable, the Institutional Review Board. Such changes will be documented in writing. Approval by the Board must be obtained prior to initiation of the amendment.

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18.0 PROTOCOL APPROVAL

HILL TOP RESEARCH, INC.

By: E. Linn Jones, MD 7-10-03
E. Linn Jones, M.D., D.A.B.D (Date)
Investigator

By: 7-14-03
Gayle K. Mulberry (Date)
Sub-Investigator

By: Ann R. Brady 7.14.03
Ann R. Brady (Date)
Sub-Investigator

Bayer Chemicals Corporation

By: _____
(Date)

EXHIBIT A

SAMPLE CONSENT FORM

CONSENT FORM

INTRODUCTION: You are being asked to take part in a research study. Before you give your consent to be a subject, it is important that you take enough time to read and understand what your participation would involve. In preparing this consent form, it has been necessary to use some technical language. Please ask questions if there is anything you do not understand.

You will be given a signed copy of this consent form and any other necessary written information prior to the start of the study.

PURPOSE: The purpose of this research study is to measure the ability of three liquid soap products to reduce the number of bacteria on the hands after repetitive use. Approximately one hundred fifty (150) people between and including the ages of 18 – 65 will be screened as potential subjects in this study. Ninety (90) subjects are expected to complete the three-visit study.

TEST ARTICLES: Two experimental liquid soap products and one marketed antibacterial liquid soap product are being tested in this study. You will be assigned to one of the three liquid soap products. Two out of every three subjects will be assigned to one of the experimental liquid soap products.

STUDY PROCEDURES: Prior to enrollment in the test, you will be asked to complete this consent form and a brief medical history questionnaire. It is possible that you may not be able to participate based on your answers to these questions. If you qualify, you will have your blood drawn (approximately 1 teaspoon) to check your blood count. Your lab results will be reviewed prior to your return to the lab. If you do not qualify, you will be contacted. You will also be given a kit containing non-antibacterial bar soap, shampoo, Ban® antiperspirant/deodorant, and rubber and poly gloves to be used at least one week prior to the start of the actual study. You will be given written instructions on how to use the kit.

After at least one week, you will be required to return to the lab. You will be asked to complete another brief medical history questionnaire. It is possible that you may not be able to participate based on your answers to these questions or the condition of the skin on your hands and wrists. You will wash your hands with a non-medicated soap. Then, your hands will be contaminated with a watery liquid containing bacteria (*Staphylococcus aureus or Serratia marcescens)*. This liquid containing the bacteria will be spread over the surfaces of the hands, and the hands will be allowed to air dry. Following air drying, the hands will be sampled. Sampling is accomplished by having you place your hands into large plastic bags to which will be added a mild soap-like solution. A laboratory technician will massage each bagged hand for one minute. The hands will be removed from the bags and the solution from each bag will be tested to determine the number of test bacteria added to the

hands. Following the baseline sampling, your hands will be washed with a non-medicated soap, rinsed with tap water and dried. You will then begin the treatment part of the study. Prior to each treatment, your hands will be contaminated with bacteria as described above. Your hands and wrists will then be treated (washed) with the test material, following specific instructions. Your hands will be contaminated and treated eleven (11) times. Your hands will be sampled (to determine the number of bacteria removed or killed by treatment) after the 1st and 11th washes. After the 1st sampling wash, the hands are rinsed with tap water and washed with a non-medicated soap and dried. Following the last sampling, your hands will be rinsed with water, washed with Hibiclens®, an antimicrobial soap, treated with alcohol, and possibly treated with Polysporin® prior to leaving the lab.

After completing the treatment visit and until your follow-up visit, you will need to check the skin on your hands each day for any pimples, bumps or rashes. Within four to eight days after you have completed treatment, you will be required to return to the lab for a follow-up visit. Your hands will be checked for infection by a Dermatologist trained in observing infection. If your hands develop irritation or a skin infection, you will be required to return to the laboratory for an extra visit to verify that the skin infection is cleared.

FEMALES OF CHILDBEARING POTENTIAL: You may not participate in this study if you are pregnant or nursing. As part of giving your consent you must agree to have a urine pregnancy test at the start of the study.

RISKS: The risks associated with this test are primarily related to contamination with the test bacteria. There is the possibility of a getting a skin infection. Approximately 25% of study participants develop a skin infection. For most study participants, no treatment is required.

Though these bacterial strains are considered relatively harmless, testing has been conducted to find antibiotics that are effective in treating infections it may cause.

You may also develop a reaction on your hands and forearms from the test materials. A reaction could be redness, swelling, itching, cracking, peeling, or in rare cases, blistering. If you have extremely sensitive skin, your hands and forearms may develop minor irritation that should lessen after treatment is completed. Also, accidental eye contact may cause minor discomfort and the affected eye should be rinsed thoroughly with water. No risks to you as a study participant, other than those described above, are anticipated during the study. Reactions are usually due to irritation, although an allergic reaction might occur. If you become allergic, it is possible that future exposures to the same ingredient may cause a skin reaction. If this occurs, you will be provided with information to minimize the chance for future exposures.

You may experience risks or side effects that are not known at this time. You will be informed in a timely manner if new information becomes available that may influence your willingness to continue in this study.

BENEFITS: You will not benefit from the applications of test articles but the study results may allow a new or improved product to be marketed.

ALTERNATIVE PROCEDURES/TREATMENTS: Because you are not being treated for a medical condition, alternative treatments do not apply to this study.

CONFIDENTIALITY: Information concerning you that is obtained in connection with this study will be kept confidential by Hill Top Research, except that the sponsoring company whose product is being tested will receive a copy of the study records. The records will be coded to protect your identity. In addition, the sponsoring company, the Institutional Review Board (IRB) and government regulatory agencies, including the U.S. Food and Drug Administration (FDA), may inspect the records of the study. Information obtained in the study may be used for medical or scientific publication, but your identity will remain confidential.

MEDICAL TREATMENT: If in the course of this study you experience illness, discomfort or injury that appears to be a result of the study, Hill Top Research will provide you with medical care at no cost to you. Providing such medical care is not an admission of legal responsibility. If such illness, discomfort or injury does occur, ask any staff member to arrange a meeting for you with the appropriate personnel.

In certain cases of illness or injury resulting from this study, workers' compensation coverage may be available. In accordance with Ohio law, Hill Top Research has secured workers' compensation coverage for participants in its studies and tests, and has paid and will pay appropriate premiums into the State Insurance Fund on behalf of such participants.

WHO TO CONTACT: If you have any questions about this study or in case of an emergency, contact Glenna, at 513-831-3114 ext. 2920 during business hours (M-F, 8:00 A.M. - 5:00 P.M.) or Ann Brady, Study Manager, at 513-831-3354 after hours. In addition, if you have any questions as to your rights as a research subject, contact the Institutional Review Board of Hill Top Research, Nancy J. Pelc, M.D., Chairman, at 1-513-831-3114.

VOLUNTARY PARTICIPATION/WITHDRAWAL: Your participation in this research study is strictly voluntary. You may refuse to participate or may discontinue participation at any time during the study without penalty or loss of benefits to which you are otherwise entitled.

If you agree to participate in this study, you are also agreeing to provide Hill Top Research with accurate information and to follow study instructions as given to you. If you fail to follow study instructions, your participation may be ended.

Your participation in the study may be discontinued at any time without your consent by the Investigator, the IRB, the FDA, or the sponsoring company.

COMPENSATION: You will be paid $95.00 for the completion of this study. You will be compensated according to the following schedule:

If you are eliminated prior to the bood draw	Visit 1	You will receive	$10.00
If you complete	Visit 1	You will receive	$25.00
If you do not qualify	Visit 2	you will receive	$30.00
If you qualify but are eliminated as an extra subject	Visit 2	you will receive	$35.00
If you complete	Visit 2	you will receive	$60.00
If you complete	Visit 3	you will receive	$95.00*

* If an extra visit is required, to insure that your hands are clear of irritation or skin infection, you will be paid an additional $10.00. (You will not be permitted to enroll on another clinical study until your skin is clear)

Payments will be made at the end of the study.

There are no anticipated expenses to you for participating in this study. All test related materials will be provided at no cost to you. (Soap, shampoo, antiperspirant/deodorant and gloves)

CONSENT TO PARTICIPATE

I know that my participation in this study is voluntary and that I have the right to refuse to participate. I know that I may withdraw from the study at any time without penalty or loss of benefits to which I am otherwise entitled. If I withdraw or am dismissed for failure to obey rules or follow directions, I understand I will only be paid for the portion of the study that I have completed. If, in the judgment of the Investigator, it is best to discontinue my participation in the study for other reasons, I will be paid either in full or for that portion of the study already completed.

If I am a female of childbearing potential, I am not currently pregnant or nursing an infant. I am using an adequate means of birth control and, if I become pregnant or believe I have become pregnant, I will notify the Investigator immediately.

CONSENT: I have read all the pages of this consent form and have been given an opportunity to ask questions about this study. Answers to such questions (if any) were satisfactory. I am eighteen years of age or older and freely and without reservation give my consent to serve as a subject in this study. By signing this form, I have not given up any of my legal rights as a research subject.

_____

Subject's Name Printed: First Middle Initial Last

_____

Subject's Signature Date

_____

Signature of Person Conducting Consent Discussion Date

SUBJECT SCREEN NO. _____
SUBJECT NO. _____

CONSENT FORM-2

INTRODUCTION: You are being asked to take part in a research study. Before you give your consent to be a subject, it is important that you take enough time to read and understand what your participation would involve. In preparing this consent form, it has been necessary to use some technical language. Please ask questions if there is anything you do not understand.

You will be given a signed copy of this consent form and any other necessary written information prior to the start of the study.

PURPOSE: The purpose of this research study is to assure that the materials used in the main study, for growing and counting bacteria recovered from the hands of subjects, will allow the growth of the bacteria. Approximately twelve (12) people between and including the ages of 18 - 65 will be screened as potential subjects in this study. Nine (9) subjects are expected to complete the one visit study.

TEST ARTICLES: Two experimental liquid soap products and one marketed antibacterial liquid soap product are being tested in this study. You will be assigned to one of the three liquid soap products.

STUDY PROCEDURES: As a participant, your hands and wrists will be washed with a non-medicated soap prior to the first treatment with the test product and after the sampling following the first treatment with the test product. Then you will wash eleven times with the assigned test product following specific directions. One of your hands will be sampled after the first and eleventh wash. Sampling is accomplished by having you place your hand into large plastic bags to which will be added a mild soap-like solution. A laboratory technician will massage your bagged hand for one minute. Your hand will be removed from the bags and the solution from each bag will be taken to the laboratory. The solution collected after the 1st wash will be discarded. The solution collected after the 11th wash will be tested to determine if it can be neutralized to allow growth of bacteria, which the laboratory will add to it. Following the sampling, you will rinse your hands and forearms in tap water.

FEMALES OF CHILDBEARING POTENTIAL: You may not participate in this study if you are pregnant or nursing. As part of giving your consent you must agree to have a urine pregnancy test at the start of the study.

RISKS: You may also develop a reaction on your hands and forearms from the test materials. A reaction could be redness, swelling, itching, cracking, peeling, or in rare cases, blistering. If you have extremely sensitive skin, your hands and forearms may develop minor irritation that should lessen after treatment is completed. Also, accidental eye contact may cause minor discomfort and the affected eye should be rinsed thoroughly with water. No risks to you as a study participant, other than those described above, are anticipated during the study. Reactions are usually due to irritation, although an allergic reaction might occur. If you become allergic, it is possible that future exposures to the same ingredient may cause a skin reaction. If this occurs, you will be provided with information to minimize the chance for future exposures.

BENEFITS: You will not benefit from the applications of test articles but the test results may allow a new or improved product to be marketed.

ALTERNATIVE PROCEDURES/TREATMENTS: Because you are not being treated for a medical condition, alternative treatments do not apply to this study.

CONFIDENTIALITY: Information concerning you that is obtained in connection with this study will be kept confidential by Hill Top Research, except that the sponsoring company whose product is being tested will receive a copy of the study data. The data will be coded to protect your identity. In addition, the sponsoring company, the Institutional Review Board (IRB) and government regulatory agencies, including the U.S. Food and Drug Administration (FDA), may inspect the records of the study. Information obtained in the study may be used for medical or scientific publication, but your identity will remain confidential.

MEDICAL TREATMENT: If in the course of this study you experience illness, discomfort or injury that appears to be a result of the study, Hill Top Research will provide you with medical care at no cost to you. Providing such medical care is not an admission of legal responsibility. If such illness, discomfort or injury does occur, ask any staff member to arrange a meeting for you with the appropriate personnel.

In certain cases of illness or injury resulting from this study, workers' compensation coverage may be available. In accordance with Ohio law, Hill Top Research has secured workers' compensation coverage for participants in its studies and tests, and has paid and will pay appropriate premiums into the State Insurance Fund on behalf of such participants.

WHO TO CONTACT: If you have any questions about this study or in case of an emergency, contact Glenna, at 513-831-3114 ext. 2920, during business hours (M-F, 8:00 A.M. - 5:00 P.M.) or Ann Brady, Study Manager, at 513-831-3354 after hours. In addition, if you have any questions as to your rights as a research subject, contact the Institutional Review Board of Hill Top Research, Nancy J. Pelc, M.D., Chairman, at 1- 513-831-3114.

VOLUNTARY PARTICIPATION/WITHDRAWAL: Your participation in this research study is strictly voluntary. You may refuse to participate or may discontinue participation at any time during the study without penalty or loss of benefits to which you are entitled.

If you agree to participate in this study, you are also agreeing to provide Hill Top Research with accurate information and to follow study instructions as given to you. If you fail to follow study instructions, your participation may be ended.

Your participation in the study may be discontinued at any time without your consent by the Investigator, the IRB, the FDA, or the sponsoring company.

COMPENSATION: You will be paid $30.00 for the completion of this study.

Payment will be made at the end of the study.

There are no anticipated expenses to you for participating in this study. All test related materials will be provided at no cost to you.

CONSENT TO PARTICIPATE

I know that my participation in this study is voluntary and that I have the right to refuse to participate. I know that I may withdraw from the study at any time without penalty or loss of benefits to which I am otherwise entitled. If I withdraw or am dismissed for failure to obey rules or follow directions, I understand I will only be paid for the portion of the test that I have completed. If, in the judgment of the Investigator, it is best to discontinue my participation in the study for other reasons, I will be paid either in full or for that portion of the test already completed.

If I am a female of childbearing potential, I am not currently pregnant or nursing an infant. I am using an adequate means of birth control and, if I become pregnant or believe I have become pregnant, I will notify the Investigator immediately.

CONSENT: I have read all of the pages of this consent form and have been given an opportunity to ask questions about this study. Answers to such questions (if any) were satisfactory. I am eighteen years of age or older and freely and without reservation give my consent to serve as a subject in this study. By signing this form, I have not given up any of my legal rights as a research subject.

_____

Subject's Name Printed: First Middle Initial Last

_____

Subject's Signature Date

_____

Signature of Person Conducting Consent Discussion Date

SUBJECT SCREEN NO. _____

SUBJECT NO. _____

EXHIBIT B

EVALUATION OF HEALTH CARE PERSONNEL HANDWASH SUBJECT INSTRUCTIONS

Today you will be given a kit of products (bar soap, shampoo, and deodorant/antiperspirant) to use exclusively during this study. Please set aside all products you normally use in these categories and use only the products in the kit. In addition, please refrain from using perfumes, deodorants or antiperspirants (other than the ones furnished), powders, talc, oils and anti-dandruff hair shampoos, and do not swim in a chemically treated pool or hot tub during the study.

Beginning today, no body lotions, medicated/antibacterial lotions, creams or ointments should be applied to any area of your skin. Also, do not take any antibiotics. These medications may affect the bacteria of the skin. If antibiotics are necessary due to illness, please report this to Hill Top Research at the phone number below.

Please use the rubber gloves provided with the product kit for dishwashing and all household chores involving dishwashing liquids, detergents, acid, alkalis, and solvents until the completion of the study.

SUBJECT SCHEDULE

TEST DAY

_____ Time of Visit: _____

1. Plan to arrive at the laboratory about 10 minutes before your scheduled time. You are expected to be prompt.
2. Please wear clothing that will allow easy access to your hands.
3. You will be required to remove all jewelry, watches, and bracelets before washing.
4. You will undergo a supervised wash regimen at the laboratory.
5. Approximate time at the laboratory - ___ hours.
6. Additional instructions will be provided for the Follow Up Visit.

FOLLOW UP VISIT

_____ Time of Visit: _____

1. A Dermatologist will check your hands for infection
2. Approximate time at the lab –1/2 hour.

If you have any questions regarding this study, please contact Glenna, Study Coordinator, at 513-831-3114 ext. 2920 between 8:00 a.m. - 5:00 p.m. or Ann Brady, Study Manager, after hours and on weekends at 513-831-3354.

EXHIBIT C

RANDOMIZATION

PROJ. NO. 03-122085-106
PAGE NO. II-130

122085.rnd

03-122085-106

STUDY RANDOMIZATION

PANELIST NUMBER	SAMPLE	
1	B	S. AUREUS
2	B	S. AUREUS
3	A	S. AUREUS
4	B	S. AUREUS
5	B	S. AUREUS
6	B	S. AUREUS
7	C	S. AUREUS
8	A	S. AUREUS
9	B	S. AUREUS
10	A	S. AUREUS
11	A	S. AUREUS
12	B	S. AUREUS
13	B	S. AUREUS
14	B	S. AUREUS
15	B	S. AUREUS
16	A	S. AUREUS
17	C	S. AUREUS
18	A	S. AUREUS
19	C	S. AUREUS
20	C	S. AUREUS
21	B	S. AUREUS
22	C	S. AUREUS
23	A	S. AUREUS
24	B	S. AUREUS
25	B	S. AUREUS
26	B	S. AUREUS
27	B	S. AUREUS
28	B	S. AUREUS
29	A	S. AUREUS
30	B	S. AUREUS
31	B	S. AUREUS
32	C	S. AUREUS
33	B	S. AUREUS
34	B	S. AUREUS
35	A	S. AUREUS
36	A	S. AUREUS
37	C	S. AUREUS
38	B	S. AUREUS
39	B	S. AUREUS
40	A	S. AUREUS
41	B	S. AUREUS
42	B	S. AUREUS
43	A	S. AUREUS
44	A	S. AUREUS
45	A	S. AUREUS
46	B	S. AUREUS
47	B	S. AUREUS
48	B	S. AUREUS
49	C	S. AUREUS
50	C	S. AUREUS

7/2/03
OLH

122085.rnd

03-122085-106

STUDY RANDOMIZATION

PANELIST NUMBER	SAMPLE	
51	A	S. AUREUS
52	C	S. AUREUS
53	C	S. AUREUS
54	C	S. AUREUS
55	C	S. AUREUS
56	C	S. AUREUS
57	B	S. AUREUS
58	B	S. AUREUS
59	C	S. AUREUS
60	A	S. AUREUS
61	A	S. AUREUS
62	A	S. AUREUS
63	B	S. AUREUS
64	A	S. AUREUS
65	A	S. AUREUS
66	A	S. AUREUS
67	A	S. AUREUS
68	A	S. AUREUS
69	A	S. AUREUS
70	A	S. AUREUS
71	A	S. AUREUS
72	A	S. AUREUS
73	A	S. AUREUS
74	A	S. AUREUS
75	A	S. AUREUS
76	C	S. MARCESCENS
77	C	S. MARCESCENS
78	C	S. MARCESCENS
79	C	S. MARCESCENS
80	C	S. MARCESCENS
81	C	S. MARCESCENS
82	C	S. MARCESCENS
83	C	S. MARCESCENS
84	C	S. MARCESCENS
85	C	S. MARCESCENS
86	C	S. MARCESCENS
87	C	S. MARCESCENS
88	C	S. MARCESCENS
89	C	S. MARCESCENS
90	C	S. MARCESCENS

7/2/03
dlh

EXHIBIT D

SUBJECT'S INSTRUCTIONS FOLLOWING STUDY COMPLETION

You have just completed participation in a clinical study, "Efficacy Evaluation of Health Care Personnel Handwash Products". During this study, your hands were in contact with a liquid containing bacteria (*Serratia marcescens* or *Staphylococcus aureus)*. Although we do not expect you to have any adverse experience as a result of participation in this study, there is a possibility that an infection may develop on your hands. .

To determine whether you have developed an infection from the test bacteria, we would like you to examine your hands and wrists daily. If you notice the appearance of any pimples, blisters or raised bumps surrounded by redness and/or swelling, please contact Glenna, Study Coordinator at (513) 831-3114 ext. 2920 during normal business hours (8:00 am- 5 pm) or Ann Brady at (513) 831-3354 after hours.

You are required to return to the test site for a follow-up visit. Your follow-up is scheduled for:

_____

Date Time

Thank you for your cooperation.

Data Collection Form 1

DEMOGRAPHICS/DERMATOLOGICAL/MEDICAL HISTORY FORM

Visit Code	Date	Subject Initials	Subject Screen #:	Study #
Subject Qualification	___/___/___ mm dd yy	___/___/___ F M L	Permanent #:	03-122085-106

Gender: ☐ Male ☐ Female	Age: _____ Years

Does the subject have any of the following at the treatment sites?

I. DERMATOLOGIC DISORDER	No	Yes	Don't Know
1. Psoriasis ?			
2. Eczema ?			
3. Skin Cancer ?			
4. Skin Allergies ? Please specify:			
5. Hives ?			

Does the Subject have any of the following (present and past)?

II. OTHER MEDICAL INFORMATION	No	Yes	Don't Know
1. Allergies.? Please specify.			
2. Hepatitis ?			
3. Heart and Vascular Disease?			
4. Liver Disease ?			
5. Kidney Disease ?			
6. Tuberculosis ?			
7. Diabetes ? Controlled? Diet [ ] Oral [ ] Insulin [ ]			
8. Cancer ?			
9. Auto-immune disease (Lupus erythematosus, thyroiditis, AIDS, etc.) ?			
10. Organ transplant ?			
11. Any other condition not listed ? Please specify:			

Is the subject taking any medication? If yes, please specify below:

III. MEDICATION	No	Yes	Don't Know
1. Antibiotics, oral or systemic ?			
2. Cortisone, Steroids, ACTH, Anti-reaction Drugs ?			
3. Heart Medication ?			
4. Insulin ?			
5. Other ?			

Comments:

Based on the above medical history, the subject is: ☐**Qualified** or ☐ **Not qualified** for the study.

Interviewer's Signature:	Date: _____/_____/_____ mm dd yy

Data Collection Form 2
INCLUSION / EXCLUSION FORM

HTR Study No.: 03-122085-106
Page No.: II-34

Visit Code	Date	Subject Initials	Subject Screen #:	Study #
Subject Qualification	___/___/___ mm dd yy	___/___/___ f m l	Permanent #:	03-122085-106

INCLUSION CRITERIA

Check one YES	NO	Subject:
		1. Is 18 through 65 years ?
		2. Has signed informed consent ?
		3. Is healthy as evidenced by responses on DCF 1 ?
		4. Has hands and wrists that are free of dermatoses, cuts, lesions, and other skin disorders ?
		5. Has fingernails that extend no longer than approximately one (1) mm past the nail bed ?
		6. Is willing to refrain from using antimicrobial soaps (liquids and/or bars) for bathing, showering, and handwashing during the entire study ?
		7. Is willing to refrain from using anti-dandruff shampoo during the entire study ?
		8. Is willing to refrain from using body lotions, medicated/antibacterial lotions, creams, oils, dishwashing liquids, talcs and other deodorant/antiperspirant products during the entire study, unless prescribed by a physician for an intercurrent illness ?
		9. Is willing to refrain from using topical steroids during the entire study, unless prescribed by a physician for an intercurrent illness ?
		10. Is willing to refrain from using topical or systemic antibiotic medication during the entire study, unless prescribed by a physician for an intercurrent illness ?
		11. Is willing to comply with all study protocol requirements ?

EXCLUSION CRITERIA

Check one YES	NO	N/A	Subject:
			1. Is currently participating in another clinical study at this or any other facility ?
			2. Has participated in any type of hand or arm wash study within the past 7 days ?
			3. Has cuts, lesions, or other skin disorders on their hands or wrists ?
			4. Has artificial nails or nail tips?
			5. Has soap, detergent, antibiotic, Polysporin® and/or perfume allergies ?
			6. Has eczema or psoriasis on their hands or wrists ?
Female	Female	Male	7. Is currently pregnant ? ☐ Yes ☐ No Of child-bearing potential: ☐ Yes ☐ No ☐ Surgically Sterile, year _____ ☐ Post-menopausal, year _____ If of child bearing potential - β-HCG Test Results: ☐ negative ☐ positive
			8. Is currently lactating ?
			9. Has been medically diagnosed as having a medical condition such as: diabetes, hepatitis, an organ transplant, an immunologic disease such as AIDS (or HIV positive), Lupus erythematosus, thyroiditis or rheumatoid arthritis ?
			10. Has another medical condition which in the opinion of the Investigator would preclude participation ?
			11. Has any responsibility for care of children under age 3, or has responsibilities for diapering, care of wounds, intravenous management or other bed-ridden related care roles.
			12. Has a known sensitivity to isopropyl alcohol or the ingredients in antibacterial soaps ?

Based upon dermatologic evaluation and the information contained in Data Collection Forms 1 and 2, the subject is:
☐ **Qualified** ☐ **Not Qualified** for participation in this study.

Reasons for disqualification: _____ Interviewer's Initials/Date: _____/_____

Investigator's Signature:	Date: ___/___/___ mm dd yy

Data Collection Form 3

INTERCURRENT ILLNESS / CONCOMITANT MEDICATION FORM

Visit Code	Date	Subject Initials	Subject Screen #:	Study #
Test Period	___/___/___ mm dd yy	___/___/___ F M L	Permanent #:	03-122085-106

I. Is skin on subject's hands and wrists still free of dermatoses, cuts, lesions, and other skin disorders? ☐Yes ☐No
If no, please indicate condition: _____

II. Has subject used non-antibacterial soap and followed the instructions in Appendix B? ☐Yes ☐No
If no, please explain: _____

III. Has subject been ill since the last visit? ☐Yes (Complete below) ☐ No

IV. Has subject used any new oral or topical medication? ☐Yes (Complete below) ☐No

Based upon the above responses, the subject is: ☐Qualified ☐ Not Qualified to continue on the study.

Reasons for disqualification: _____

TO BE COMPLETED IF SUBJECT HAS AN INTERCURRENT ILLNESS

Date of Onset: _____ Date Reported: _____ Date Resolved: _____

Describe condition: _____

_____

Was reaction related to treatment? ☐Not related ☐ Possibly related ☐ Definitely related ☐ Other (explain)

Action Taken: ☐None ☐ Continued on study ☐ Withdrawn from the study ☐ Consulted physician
☐ Medication taken (Complete below) ☐Hospitalized ☐ Other (explain)

Additional Comments: _____

CONCOMITANT MEDICATION

Medication *(Oral or Systemic)*	**Total Daily Dose**	**Start Date** mm / dd / yy	**Stop Date** mm / dd / yy	**Indication** *(Reason for Taking)*
		/ /	/ /	
		/ /	/ /	
		/ /	/ /	

Comments:

Interviewer's Signature:	Date: ___/___/___ mm dd yy

Data Collection Form 4

HEALTH CARE PERSONNEL HANDWASH BACTERIAL COUNTS

CFU/mL of Sampling Solution

Date	Subject Initials	Subject Screen #	Study #
___/___/___ mm dd yy	___/___/___ F M L	Permanent #:	03-122085-106

BASELINE					
LEFT HAND DILUTIONS			RIGHT HAND DILUTIONS		
10^{-4}	10^{-5}	10^{-6}	10^{-4}	10^{-5}	10^{-6}
CFU/mL _____ Counted by : _____/			CFU/mL _____ Counted by : _____/		

LEFT HAND			WASH 1			RIGHT HAND	
10^{-1}	10^{-2}	10^{-3}	10^{-4}	10^{-1}	10^{-2}	10^{-3}	10^{-4}
CFU/mL _____ Counted by : _____/_____.				CFU/mL _____ Counted by : _____/_____.			

LEFT HAND			WASH 11			RIGHT HAND	
10^{-1}	10^{-2}	10^{-3}	10^{-4}	10^{-1}	10^{-2}	10^{-3}	10^{-4}
CFU/mL _____ Counted by : _____/_____.				CFU/mL _____ Counted by : _____/_____.			

Calculations by: _____/_____ Raw data reviewed by _____/_____
Calculations Verified by: _____/_____
*10^{-1} dilution is the sum of 1.0 mL spread across 3 plates.
Underlined values are used for calculation of CFU/mL
TNTC – Too Numerous To Count

Investigator's Signature:	Date: _____/_____/_____ mm dd yy

Data Collection Form 5A

Subject Initials ______________ Subject #__________ Study No. 03-122085-106

Page No. II-37

ADVERSE EVENTS

Symptom / Event	Onset Date	End Date	SAE[1] Y/N	Severity	Action Taken	Outcome	Relation-ship	Investigator Signature/Date

Entry Date	Comment/Note:	Initials

Symptom / Event	Onset Date	End Date	SAE[1] Y/N	Severity	Action Taken	Outcome	Relation-ship	Investigator Signature/Date

Entry Date	Comment/Note:	Initials

Symptom / Event	Onset Date	End Date	SAE[1] Y/N	Severity	Action Taken	Outcome	Relation-ship	Investigator Signature/Date

Entry Date	Comment/Note:	Initials

Note: Severity, Relationship and Outcome MUST be determined by principal investigator.

Severity:	1=Mild	2=Moderate	3=Severe	
Relationship:	1=Definite	2=Probable	3=Possible	4=Unrelated
Action Taken:	1=None	2=Rx Therapy	3=Discontinued Study	4=Other (specify)
Outcome:	1=Resolved w/o sequelae	2=Resolved w/ sequelae (describe)	3=Ongoing	4=Death

[1]Serious Adverse Event/Experience

Data Collection Form 5B

Subject Initials _____ Subject #_____ Study No. 03-122085-106

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ADVERSE EVENTS

Symptom / Event	Onset Date	End Date	SAE[1] Y/N	Severity	Action Taken	Outcome	Relation-Ship	Investigator Signature/Date

Entry Date	Comment/Note:	Initials

Note: Severity, Relationship and Outcome MUST be determined by principal investigator.

Severity:	1=Mild	2=Moderate	3=Severe	
Relationship:	1=Definite	2=Probable	3=Possible	4=Unrelated
Action Taken:	1=None	2=Rx Therapy	3=Discontinued Study	4=Other (specify)
Outcome:	1=Resolved w/o sequelae	2=Resolved w/ sequelae (describe)	3=Ongoing	4=Death

[1]Serious Adverse Event/Experience

Visit Code	Date	Subject Initials	Subject Screen #:	Study #
Follow-up Visit	____/____/____ mm dd yy	____/____/____ F M L	Permanent #:	03-122085-106

Date Subject Entered the Study:	Follow-Up Visit Date:
____/____/____ mm dd yy	____/____/____ mm dd yy

Does the subject's hands have the presence of pimples, blisters, or raised itching bumps surrounded by erythema and/or edema that may be indicative of a skin infection?

☐ YES ☐ NO If yes, complete below:

Clinical Observations: (Include date of onset and descriptions/severity/locations, etc.)

_____

_____

_____

Comments: _____

_____

_____

_____

Has the subject had any health related issues since the treatment procedure?

☐ YES ☐ NO If yes, complete below

Comments: _____

_____

_____

_____

Medical Consultant's Signature:		Date ____/____/____ mm dd yy

Source Document 1

Healthcare Personnel Handwash Data Sheet

Date: _____ **Tech initials:** _____ **Water Temp.:** _____

Product _____

Subject No. _____

Conditioning Wash Finish Time_____

TEST WASHES

Procedure	Baseline	Test wash 1	Test wash 11
Contamination			
Finish wash			
Finish massage			
Sample time			

WASHES

Procedure	Wash 2	Wash 3	Wash 4	Wash 5	Wash 6	Wash 7	Wash 8	Wash 9	Wash 10
Contamination									
Finish Wash									

All Times recorded reflect finish times